REMARKS

Claims 1-4, 6-31, and 33-39 are now pending in the application. The Examiner is respectfully requested to reconsider and withdraw the rejections in view of the amendments and remarks contained herein.

REJECTION UNDER 35 U.S.C. § 112

Claims 1-4, 6-31, and 33-39 are rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. The examiner notes that the claims contain subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the art that the inventors had possession of the claimed invention. The Examiner notes that the limitation "sensing gross load current in the course of isolating each of the stacks" is not supported in the specification.

Independent claims 1, 13, 19, 31, and 35 have been amended to comply with the written description requirements of the first paragraph of 35 U.S.C. § 112. Applicant notes that the limitation has been amended to include "determining" the gross load current. Support for determining the gross load current can be found in paragraph [0027] of the present application, where it is stated that "[t]he controller 112 monitors the current sensors 190 and uses current information for each stack 104 to determine a total (i.e., gross) load current generated by the stacks 104a and 104b."

Therefore, Applicant respectfully asserts that the rejection under 35 U.S.C. § 112, first paragraph, is rendered moot. Accordingly, Applicant respectfully requests that

the Examiner withdraw the rejection of claims 1, 13, 19, 31, and 35, and their respective dependent claims.

Claims 1-4, 6-31, and 33-39 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. These rejections are respectfully traversed.

As stated above, independent claims 1, 13, 19, 31, and 25 have been amended to comply with 35 U.S.C. § 112. Accordingly, Applicant respectfully asserts that rejection under 35 U.S.C. § 112, second paragraph, is rendered moot.

Applicant respectfully requests that the Examiner withdraw the rejection of independent claims 1, 13, 19, 31, and 35 as well as their respective dependent claims.

REJECTION UNDER 35 U.S.C. § 102

Claims 1-4, 6, 7, 9-27, 29-31 and 33-39 are rejected under 35 U.S.C. § 102(b) as being anticipated by *Sato* et al. (JP 06-267577). This rejection is respectfully traversed.

At the outset, Applicant respectfully notes that independent claims 1, 13, 19, 31, and 35 include the limitation of controlling one or more individual currents of one or more fuel cell stacks **based upon a gross load current**. Applicant notes that the gross load current, as previously stated, is the totality or **sum** of the individual currents of the fuel cell stacks as stated in paragraph [0027].

The Examiner relies upon Sato to teach each of the limitations of the independent claims 1, 13, 19, 31, and 35. Applicant respectfully asserts that *Sato* fails teach controlling individual currents of fuel cell stacks **based upon the gross load**

current (i.e., the sum of the individual currents). Instead, Applicant respectfully asserts that *Sato* teaches controlling individual currents of fuel cell stacks **based upon a comparison of an individual current** of a fuel cell stack **with an individual current threshold** that is specific to that fuel cell stack.

For anticipation to be present under 35 U.S.C §102(b), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. *Scripps Clinic & Res. Found. V. Genentech, Inc.*, 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. *Constant v. Advanced Micro-Devices, Inc.*, 7 USPQ.2d 1057 (Fed. Cir. 1988). Here, Applicant respectfully asserts that *Sato* fails to teach the limitation of controlling one or more individual currents of one or more fuel cell stacks, **based upon the gross load current**, as independent claims 1, 13, 19, 31, and 35 of the present application recite.

As best understood by Applicant, *Sato* teaches controlling individual currents of fuel cell stacks **based upon a comparison of an individual current** of a fuel cell stack **with an individual threshold current** that is specific to that fuel cell stack. For example, in paragraph [0029] *Sato* states that the controller "generates the control signal of each valve with the . . . procedure **according to the output current of each stack**." (Emphasis added).

Further support for Applicant's position that *Sato* regulates individual currents of fuel cell stacks based upon a comparison of an **individual current** of a fuel cell stack with **an individual current threshold** can be found in paragraph [0011], where *Sato* states that:

> the fuel gas of each fuel cell stack, the pressure of air, and/or each fuel cell stack, the gas concentration of air, and/or the temperature control means of each fuel cell stack are **controlled for the output current** and **its output current** command value of **each** fuel cell stack. (Emphasis added).

Furthermore, in paragraph [0013] *Sato* states that "an alarm is generated when the **output current value** . . . of a fuel cell stack becomes below a **predetermined value**." (Emphasis added). Therefore, Applicant respectfully asserts that *Sato* teaches controlling individual currents of fuel cell stacks **based a comparison of an individual current** of a fuel cell stacks **with an individual current threshold** that is specific to that fuel cell stack.

In contrast with *Sato*, the present application involves regulating currents of fuel cell stacks **based upon a gross load current** (i.e., the sum of the individual currents). Paragraph [0023] of the present application states that:

> a system controller 112 is configured to produce a desired current across the loads 108 and 116 by adjusting, **based on the gross load current**, at least one parameter affecting at least one input to and/or output from at least one of the stacks 104. Such parameters include but are not limited to pressure, humidity, stoichiometry, nitrogen dilution and temperature. Thus current generated by a stack 104 can be controlled and varied, for example, by controlling the anode and/or cathode gas streams for **that** stack. (Emphasis added).

Applicant respectfully notes that, the controller of the present application controls individual currents of one or more fuel cell stacks **based upon the gross load current**. More specifically, the controller controls one or more individual currents of one or more fuel cell stacks based upon **a comparison between the gross load current and a desired gross load current** (i.e., the desired current across the loads).

Applicant respectfully asserts that *Sato* fails to teach the limitation of controlling one or more individual currents of one or more fuel cell stacks **based upon the gross**

load current (i.e., the gross of the individual currents). Therefore, Applicant respectfully asserts that *Sato* does **not** anticipate the present application under 35 U.S.C. § 102.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections and allow independent claims 1, 13, 19, 31, and 35 for at least the above reasons. Furthermore, Applicant respectfully requests that the Examiner withdraw the rejections and allow the respective dependent claims of claims 1, 13, 19, 31, and 35 for at least similar reasons.

Claims 1-4, 6, 7, 9, 12-24, 27-31, 33-35 and 38 are rejected under 35 U.S.C. § 102(a) as being anticipated by *Konuma* et al. (JP 2003-243008). These rejections are respectfully traversed.

As previously noted by Applicant, independent claims 1, 13, 19, 31, and 35 include the limitation of controlling individual currents of one or more fuel cell stacks **based upon the gross load current**. The Examiner relies upon *Konuma* to teach each of the limitations of the independent claims 1, 13, 19, 31, and 35. However, Applicant respectfully asserts that *Konuma*, like *Sato*, fails to teach controlling individual currents of one or more fuel cell stacks **based upon the gross load current.** Instead, Applicant respectfully asserts that *Konuma* teaches controlling the individual output power of fuel cell stacks **based upon a comparison of the output power of a fuel cell stack with an individual output threshold** that is specific to that fuel cell stack.

As stated above, for anticipation to be present under 35 U.S.C §102(a), there must be no difference between the claimed invention and the reference disclosure as viewed by one skilled in the field of the invention. *Scripps Clinic & Res. Found. V.*

Genentech, Inc., 18 USPQ.2d 1001 (Fed. Cir. 1991). All of the limitations of the claim must be inherent or expressly disclosed and must be arranged as in the claim. Constant v. Advanced Micro-Devices, Inc., 7 USPQ.2d 1057 (Fed. Cir. 1988). Here, Applicant respectfully asserts that *Konuma* fails to disclose the limitation of controlling one or more individual currents of one or more fuel cell stacks, **based upon the gross load current**.

As best understood by Applicant, *Konuma* teaches controlling the individual output power one or more fuel cell stacks **based upon a comparison of the individual output power** of a fuel cell stack **with an individual output power threshold**. Furthermore, Applicant notes that the individual output power threshold is specific to each fuel cell stack.

For example, it is stated in paragraphs [0021] and [0024] of *Konuma* that the controller "controls the number of operation of two or more fuel cell stacks so that **each** [sic] power of the fuel cell of two or more fuel cell stacks does not become **below the minimum electric energy set up beforehand**." (Emphasis added; parantheticals omitted). Therefore, Applicant respectfully asserts that *Konuma* fails to teach controlling one or more individual currents from one or more fuel cell stacks **based upon the gross load current** as independent claims 1, 13, 19, 31, and 35 of the present application recite.

Furthermore, as previously stated, the present application involves controlling one or more individual **currents** of one or more fuel cell stacks based upon the gross load **current** and a comparison of the gross load **current** with a desired gross load **current**. In contrast, as best understood by Applicant, *Konuma* involves controlling the

individual output **power** of one or more fuel cells based upon a comparison of the individual output **power** of a fuel cell stack with an individual output **power** threshold that is specific to that fuel cell stack.

For example, paragraph [0021] of *Konuma*, as cited by the Examiner, states that "each [sic] **power** of the fuel cell of two or more fuel cell stacks does not become below the minimum electric energy set up beforehand." (Emphasis added). Applicant respectfully notes that the regulation of **power** does not *necessarily* involve **current**. Applicant further notes that **power** may be expressed without reference to **current**, by the following equation that is well known to skilled artisans.

$$P = \frac{V^2}{R}$$

Paragraph [0024] of *Konuma* further indicates that the **power** regulated does **not** involve **current**, where *Konuma* states that "two or more of the supply **voltages** ... [are] supplied to a **load** . . .. " (Emphasis added). Applicant respectfully asserts that the express inclusion of voltage (**V**) and a load (**R**) in *Konuma* inherently **excludes current**, therefore supporting Applicant's position that *Konuma* does not *necessarily* involve **current** in the regulation of **power** of fuel cell stacks, and, as such, does not include comparing a **gross current** to a **desired current**.

Therefore, Applicant respectfully asserts that *Konuma* does **not** anticipate the present application under 35 U.S.C. § 102 because *Konuma* fails to disclose the limitation of controlling one or more individual **currents** of one or more fuel cell stacks **based upon a gross load current**.

Accordingly, Applicant respectfully requests that the Examiner withdraw the rejections of independent claims 1, 13, 19, 31, and 35 under 35 U.S.C. § 102(a) for at

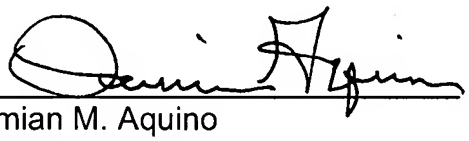
least the above reasons. Furthermore, Applicant respectfully requests that the Examiner withdraw the rejections of each of the respective dependent claims of claims 1, 13, 19, 31, and 35 for at least similar reasons.

CONCLUSION

It is believed that all of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicant therefore respectfully requests that the Examiner reconsider and withdraw all presently outstanding rejections. It is believed that a full and complete response has been made to the outstanding Office Action and the present application is in condition for allowance. Thus, prompt and favorable consideration of this amendment is respectfully requested. If the Examiner believes that personal communication will expedite prosecution of this application, the Examiner is invited to telephone the undersigned at (248) 641-1600.

Respectfully submitted,

Dated: May 11, 2007

By: 

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